Date (dd.mm.yyyy):   15.12.2022

Product description:

SOMATOM go.Top

1   Product Overview

Included products are listed below:

Item	Description	Qty	Rel
	SOMATOM go.Top		
1.	**SOMATOM go.Top** 14460603 / Country of Origin: CN	1	R
2.	**SW Base Package** 14460605 / Country of Origin: DE	1	R
3.	**SW Base Extension VA40** 14472863 / Country of Origin: DE	1	R
4.	**TwinSpiral Dual Energy** 14468565 / Country of Origin: DE	1	R
5.	**myExam Compass** 14468563 / Country of Origin: DE	1	R
6.	**Cardio Base Package** 14468560 / Country of Origin: DE	1	R
7.	**Scan&GO wireless edition** 14460606 / Country of Origin: CN	1	R
8.	**High-speed 0.33 s** 14460624 / Country of Origin: DE	1	R
9.	**Ultra-FAST IRS II** 14468558 / Country of Origin: DE	1	R
10.	**307 kg Patient Table** 14460885 / Country of Origin: DE	1	R
11.	**2nd Control-room Monitor** 14460637 / Country of Origin: CN	1	R
12.	**myExam Cockpit** 14468564 / Country of Origin: DE	1	R

Unrestricted

| 13. | **Coronal Supine Head Holder** | 1 | R |
| | 14460644 / Country of Origin: DE | | |

| 14. | **Table Accessories Set** | 1 | R |
| | 14460643 / Country of Origin: CN | | |

| 15. | **Identifier SRS** | 1 | R |
| | 14460600 / Country of Origin: DE | | |

| 16. | **Advance Plan Information** | 1 | R |
| | 14468552 / Country of Origin: DE | | |

| 17. | **AppS Training Imaging** | 1 | R |
| | 14460697 / Country of Origin: DE | | |

| 18. | **syngo.via RT Bundle Identifier** | 1 | R |
| | 14444867 / Country of Origin: DE | | |

| 19. | **syngo.via CT Workplace SW VB60** | 1 | R |
| | 14477239 / Country of Origin: DE | | |

| 20. | **syngo.via Project Identifier** | 1 | R |
| | 14456549 / Country of Origin: DE | | |

| 21. | **syngo.via VB60 Documentation Check** | 1 | R |
| | 14476566 / Country of Origin: DE | | |

| 22. | **Workplace/Workstation Hardware** | 1 | R |
| | 14474714 / Country of Origin: CZ | | |

| 23. | **Prime HW Support WS 5y** | 1 | R |
| | 14457028 / Country of Origin: DE | | |

| 24. | **Monitor EIZO MX232W col. 2.1MP** | 2 | R |
| | 14444874 / Country of Origin: JP | | |

| 25. | **CTWP CT Cardiac Package** | 1 | R |
| | 14472811 / Country of Origin: DE | | |

| 26. | **syngo.CT Vascular Analysis #1** | 1 | R |
| | 14472570 / Country of Origin: DE | | |

| 27. | **syngo.CT Neuro DSA #1** | 1 | R |
| | 14472738 / Country of Origin: DE | | |

| 28. | **syngo.CT Neuro Perfusion #1** | 1 | R |
| | 14472732 / Country of Origin: DE | | |

| 29. | **syngo.CT Colonography #1** | 1 | R |
| | 14472765 / Country of Origin: DE | | |

| 30. | **syngo.CT Pulmo 3D #1** | 1 | R |
| | 14472759 / Country of Origin: DE | | |

| 31. | **syngo.CT Body Perfusion #1** | 1 | R |
| | 14472771 / Country of Origin: DE | | |

| 32. | **AppS Train Pkg syngo.via CT WP** | 1 | R |
| | 14444839 / Country of Origin: DE | | |

| 33. | **Handover AppTrain CT Cardiovascular** | 1 | R |
| | 14463739 / Country of Origin: DE | | |

| 34. | **syngo.via Modality WP Impl. Pkg. HQ** | 1 | R |
| | 14444817 / Country of Origin: DE | | |

| 35. | **Travel Costs HQ** | 1 | R |
| | 14442297 / Country of Origin: DE | | |

T O T A L quantity is for one system

Date (dd.mm.yyyy):   15.12.2022

Optional products are listed below:

Item	Description	**Qty**	**Rel**

SOMATOM go.Top

T O T A L quantity is for one system

2   Technical description

Item	Description
1	**SOMATOM go.Top**

Make success your daily business

In a market characterized by intense competition, more selective patients, and reimbursement cuts, healthcare providers must find ways to leverage technological advancements and secure income and referrals. To keep the business running, it is crucial for CT departments to differentiate themselves and deliver excellent patient-centered care. To help you succeed day after day, we developed the SOMATOM® go. platform. As a member of this family, SOMATOM go.Top supports all users to provide the best scan for every type of patient - no matter the clinical demands and challenges. The scanner features a unique tablet-based mobile workflow, user guidance with our GO technologies, and exclusive innovations such as Tin Filter low-dose technology. SOMATOM go.Top is built for personalization of processes and care, allowing every operator to optimally adapt to the individual patient and indication while interacting with patients in a more personalized way than ever before. Produce excellent results for the full clinical spectrum including Dual Energy imaging*, and offer what others cannot - for a successful CT business.

SOMATOM go.Top started with you, our customers. Based on many conversations with healthcare professionals, we realized that we needed to pursue new ideas and approaches to computed tomography. We therefore conducted extensive interviews with 500 customers from eleven countries to learn about your everyday needs and challenges. In co-creation sessions, we asked you what your ideal CT scanner would look like. Having gathered a wealth of insights, we commissioned a group of 50 Siemens engineers to build the best possible CT scanner for routine and chosen advanced tasks. The result is not simply a scanner but a completely new CT platform specifically designed to overcome the obstacles associated with acquiring, operating, and maintaining a CT system. SOMATOM go.Top is part of this platform.

Go for high performance with trendsetting workflows

For efficiency independent of the operator's level of experience and a more personal interaction with the patient, SOMATOM go.Top is built on a unique concept of mobile operation** and work flow automation - for the first time available both in routine and advanced fields.

Go for the full clinical spectrum with patient-centric technologies

SOMATOM go.Top enables you to confidently offer specialized CT procedures, including Dual Energy*. With patient-centric technology and workflows to optimally adapt to each type of patient, all operators can turn challenging fields into routine.

Go for business growth with an all-in-one solution

SOMATOM go.Top features an all-in-one solution resulting in reduced total cost of ownership - while also opening additional reimbursement opportunities for business growth.

Work more efficiently and patient-friendly with the new mobile workflow**

Item	Description

A central element of optimizing efficiency and improving patient comfort is an entirely new approach to operating the scanner. Built around a new mobile workflow, SOMATOM go.Top features a line-up of innovative solutions. Tablet, remote control, camera, injector arm*, and a new workplace design bring an unparalleled level of flexibility and mobility to daily CT procedures.

Tablet**   There are 3 workplaces on CT acquisition,doctor and tablet

The lightweight, high-resolution tablet gives you total freedom over how you work. With Scan&GO technology, you just need a few steps for the entire scan. Start checking patient information as soon as you collect them from the waiting room, and then prepare the scan directly at the gantry to stay with the patient for longer. Since the images are sent wirelessly from the scanner to the tablet, operators can return to the patient after the scan and stay there while previewing the images and communicating with radiologists for instant feedback if required.

Remote control   This is a standard control not mentioned in tender

The easy-to-use Bluetooth remote control complements the tablet operation by streamlining scanning and making workflow processes more efficient. It simplifies patient positioning by removing the need to use hard-to-reach controls on the gantry. Adjust the table position so everything is ready to go once the patient arrives, and start the X-ray scan remotely. Then, end examinations smoothly by moving the table into the unload position as soon as the scan is over.

New workplace design

Thanks to gantry-integrated computers, the SOMATOM go. platform gives our customers complete flexibility over where they position their workstation. Depending on their needs and infrastructure, they can set it up in the same room, outside the scan room, or in a separate control room. By using the unique "niche" concept, for example, customers can position the console in the same room as the scanner while being perfectly safe from radiation. Thus, they can stay longer with their patients and solve any positioning problems quickly.

Halo (incl. camera, visual countdown, mood lighting) This standard item is additional to tender

Keep a close eye on the patient for the rest of the examination time. Its 90° viewing angle gives you a view of the tunnel on the stationary monitor. In addition to the camera, the Halo assembly includes ambient mood lighting and a digital visual countdown to help them comply with breath-hold times.

Automate your workflow with GO technologies

Another important factor contributing to high performance, independent of the operator's level of experience, is workflow automation. SOMATOM go.Top features a holistic set of intuitive solutions that addresses your workflow not only at the scanner but also beyond. These features are now available for the first time in both routine scanning and advanced clinical fields. By reducing repetitive workflow steps, GO technologies help standardize and simplify all departmental processes - from patient setup to image distribution, archiving, and reading. You can therefore work more efficiently and focus on your patients - two key factors for running a successful business.

Item	Description

Clinical consistency in cardiac CT*

Stay ahead of the competition with optimized preparation, fast scanning, and standardized results in every cardiac case. Seamless integration of GO technologies allows you to devote more time to your patient.

Speed and standardization in acute and emergency care

Our workflows and technology allow you to move fast and make confident, patient-focused decisions when every second counts.

Stellar detector

SOMATOM go.Top features a Stellar detector boosting an Integrated Circuit Detector technology, where photodiode and electronics are integrated on one single integrated circuit. It has been shown in literature that this integrated design allows superior imaging compared to conventional detector circuit designs, supporting, e.g.,

- superior objective and subjective image quality in head CTs.

reduced image noise and streak artifacts, especially in low dose or low kV imaging or in high attenuation areas such as the shoulder and pelvis regions.

improved image quality and low-contrast detectability in abdominal CT of overweight or obese patients.

lower image noise and improved image quality in coronary CTA and coronary stent imaging

Due to the Integrated Detector Circuit design of the Stellar detector, electronic components (microchips, conductors **,** etc.) are integrated directly at the photo diode. This reduces electronic noise coming from the detector elements and thus minimizes the negative impact of electronics noise to image quality. TrueSignal technology for minimized electronic noise.

Sensitive scanning in pediatrics

Put the wellbeing of your littlest patients - and their parents - first. Use the mobile workflow to stay close to the child as you prepare the scan, and minimize radiation exposure with dedicated pediatric solutions.

CARE kV, 10 kV Steps, CARE Child High tension is regulated in 10KV steps and with tin filter redusce dose

CARE kV automatically tailors tube voltage according to patient size and clinical task. With the selection of optimal kV level between 70 and 140 kV, CARE kV minimizes dose. It further simplifies the process by automatically aligning the tube current with the selected kV.

Our unique 10 kV Steps offers a more patient-specific and individualized dose management thanks to finer kV selection at intervals of 10 kV.

CARE Child offers scan parameters to be adapted to even the smallest patient size. Dedicated pediatric protocols automatically set a low tube voltage- usually 70 kV, as SOMATOM go.Top can offer the highest tube current in its class (standard 625mA, optional 825mA) - while CARE

Item	Description

Dose4D™ optimizes dose distribution and offers special modulation curves.

Patient-centric technologies in routine CT

Deliver consistent, reliable results in routine CT. Guided workflows and cutting-edge technologies allow you to optimally adapt to each patient in routine oncology, vascular, orthopedic, and neuro imaging.

High spatial resolution The resolution is better than in tender

SOMATOM go.Top features continuous 0.6-mm collimation across the full width of the Stellar detector. It achieves uniform scanning over longer ranges at high spatial resolution and speeds. Also, the detector always provides the thin-slice data necessary for flexibility in postprocessing. The Stellar detector is equipped with an advanced 3D anti-scatter grid for precision imaging. This high-end technology is carefully manufactured to achieve excellent grid homogeneity. It minimizes scattered radiation and cross-talk, so you can use less radiation to produce outstanding, high-resolution images with minimal noise.

Tin Filter The additional filter for low dose pediatric and dual energy investigations is a standard item for CT

Inherited from high-end dual-source scanners, Tin Filter technology cuts out lower energies to reduce dose and optimizes contrast between soft tissue and air. This has direct benefits for imaging areas such as the lungs, colon, and sinuses. In addition, clinical experience shows that Tin Filter technology reduces beam-hardening artifacts and improves image quality in bony structures, which means it is also extremely useful in orthopedic examinations. As a result, you get CT imaging at exceptionally low dose levels, comparable to conventional X-ray.

Tin Filter technology protects you and your patients with ultra-low doses during intervention. Factory protocols for low-dose lung cancer screening, colon and sinus employing the tin filter. Only Siemens Healthineers CT scanners enable lung imaging powered by Tin Filter technology.

The gantry connector box is a key-locked storage box at the side of the gantry including also the on-off gantry switch and an interface for USB ports and memory storage SD devices.

Standard accessories include paper roll holder, mattress for patient table, head holder, cushion set for head holder, patient restraint set, straps, head rest, knee support cushion.

* Optional

** Depending on country local release

---

2   **SW Base Package**

GO Technologies

Scan&GO

Refer to the detailed description of the approved Scan&GO edition (Wireless, tablet, remote).

Check&GO

Based on big data, this intelligent algorithm flags up problems with coverage or contrast distribution just as they occur, for immediate action or correction. This allows you to correct

Item	Description

issues on the go, avoid subsequent errors as well as stop the archival sub-optimal images. It further features:

- Quality-control images are sent wirelessly to the tablet, so you can review them directly.

- Check&GO helps users of all levels of experience produce high-quality images – from routine cases to more advanced. This helps users deliver the right images on the planned procedure, avoiding rescheduling, thereby increasing process efficiency.

- Check&GO detects the center and the radius of the arteries, based on different landmarks depending on the scanned body region the arterial enhancement is measured at relevant locations.

Recon&GO

Recon&GO enable the creation of Inline results, a set of fully automated advanced postprocessing applications as an alternative to the regular semiautomatic *syngo* .via workflows.

This reduces post-processing to zero-clicks with Recon&GO and its automatically corrected orientations.

Benefit from Recon&GO's standardized and consistent orientations, in typically challenging situations where patients can be miss-positioned or uncooperative.

Recon&GO - Inline Results includes:

Multi-recon

Automatic generation of multiple series in different orientations (coronal / sagittal / axial) or image impressions (soft tissue / air / bone /...)

Anatomical Ranges (Parallel / Radial)

Automatic generation of radial and parallel ranges in any anatomical orientation and thickness. This automation saves time by avoiding manual workflow steps. Just configure your required results once and Recon&GO will always create them like a conventional reconstruction.

Table and Bone Removal Radial Ranges

Zero-click bone-free VRT reconstruction that facilitates a precise vascular assessment by visualizing blood vessels without interfering anatomical structures

Vascular Ranges

Zero-click vessel centerline extraction and anatomical labeling of the main vessels with display of Curved Planar Reconstruction

CT View&GO

The CT View&GO is viewing station fit for multiple use cases with multiple advantages, such as:

Item	Description

1. Take advantage of intuitive and customizable cross-specialty viewing

Optimize investment by providing postprocessing directly at the scanner

Same look-and-feel for all your modalities and reading software

Optimize departmental communication

Efficient reading in a wide variety of clinical areas:

Table and Bone Removal This item is also on doctor workstation

Fast accurate presentation of subtracted CT Angiographic data sets

Vessel Extension This item is also on doctor workstation

- Set of tools and layouts for guided creation of CPR (Curved Planar Reconstructions)

Comprehensive length and diameter measurements

Endoscopic View This item is also on doctor workstation

Virtual Endoscopy software enabling visualization of airways and intestines

Diameter / WHO area

Longitudinal lesion measurements and WHO for enhanced clinical decisions in oncology

ROI HU Threshold

Evaluation and display tissue densities within a certain HU range.

Lung Lesion Segmentation This item together with

The Lung Nodules Segmentation tool in CT View&GO performs an automated segmentation of solid and subsolid lesions in lungs, providing the volume and diameter according to the Lung-RADS guidelines.

Spine Ranges

- Guided reconstruction of anatomically aligned spine

Curved Planar Reconstructions (CPR)

Automatic detection and labeling of vertebrae

SureViewTM - Multislice Image Reconstruction System

Sureview ensures that image quality is kept constant for all scan speeds, independent of the selected volume pitch. There is higher pitch accuracy with settings available in steps of 0.1, simplifying processes by handling complex parameter settings

Item	Description

Integrated FAST CARE Solutions:

A comprehensive package of Fully Assisting Scanner Technologies (FAST) and Combined Applications to Reduce Exposure (CARE). It ensures maximum workflow efficiency and patients receiving the right dose for their imaging requirements.

FAST Planning

FAST Planning is an AI Machine Learning powered set of algorithms that allow fast, organ-based setting of scan and reconstruction ranges. This enables consistent and reproducible acquisitions in Single and Dual Energy scans. By automating the workflow, users increase efficiency due to reduced manual steps and effort in scan preparation.

The Machine learning algorithm is trained with several hundreds of patient datasets in order to overcome even the most challenging and abnormal anatomies. Landmark detection technology recognizes known "human anatomy anchors" on the topogram and the scan range automatically snaps to the correct region. It:

1. Prevents the range from being set too short, so no parts of the organ are cut off.

Prevents range from being set too long, so patients are not over-radiated.

The intelligent algorithms from FAST Planning suggests further iso centering optimization for head exams after the topogram*

*Availability depends on country-specific regulatory approval and release

FAST ROI

The FAST ROI feature automatically identifies regions of interest and calculates HU values in bolus-tracking examinations.

SAFIRE (CARE Application)

Equipped with SAFIRE, a model-based iterative reconstruction, SOMATOM go. scanners achieve up to 60% dose reduction while maintaining image quality and detail visualization combined with fast image reconstruction. By this, equivalent results can be achieved at less dose, filling up the heat storage of the system more slowly and therefore, additionally, increasing the heat storage capacity.

The comprehensive iterative reconstruction method SAFIRE brings real model- based raw data based iterative reconstruction to the SOMATOM go. Dose reduction with CT has been limited by the currently used filtered back projection (FBP) reconstruction algorithm. When using this conventional reconstruction of acquired raw data into image data, a trade-off between spatial resolution and image noise has to be considered. Higher spatial resolution increases the ability to see the smallest detail; however, it is directly correlated with increased image noise in standard filtered back projection reconstructions as they are used in CT scanners today.

* In clinical practice, the use of SAFIRE may reduce CT patient dose depending on the clinical task, patient size, anatomical location, and clinicalpractice. A consultation with a radiologist and a physicist should be made to determine the appropriate dose to obtain diagnostic image quality for the particular clinical task. The following test method was used to determine a 54 to

Item	Description

60% dose reduction when using SAFIRE.

Noise, CT numbers, homogeneity, low-contrast resolution and high contrast resolution were assessed in a Gammex 438 phantom. Low dose data reconstructed with SAFIRE showed the same image quality compared to full dose data based on this test. Data on file

CARE Dose 4D

CARE Dose4D provides a fully automated dose modulation solution. The algorithm automatically modulates tube current for optimum image quality. This results in deduced dose levels, depending on patient size and anatomy, i.e. there is automatic patient & organ specific tube current adaption.

CARE Filter: Specially designed X-ray exposure bow-tie filter installed at the tube collimator.

CARE kV, 10 kV Steps, CARE Child

CARE kV automatically tailors tube voltage according to patient size and clinical task. With the selection of optimal kV level between 70 and 140 kV, CARE kV minimizes dose. It further simplifies the process by automatically aligning the tube current with the selected kV.

Our unique 10 kV Steps offers a more patient-specific and individualized dose management thanks to finer kV selection at intervals of 10 kV.

CARE Child offers scan parameters to be adapted to even the smallest patient size. Dedicated pediatric protocols automatically set a low tube voltage - in most cases 70 kV - while CARE Dose4D optimizes dose distribution and offers special modulation curves.

CARE Topo

Real time topogram which can be stopped at any time. Manual interruption possible once desired anatomy has been imaged.

CARE Bolus

Operating mode for CM-enhancement triggered data acquisition. The objective is optimum utilization of the contrast medium bolus in its "plateau" phase in the target organ. This option has been especially adapted to the increased speed and timing requirements resulting from the multirow capability and faster rotation. The CM enhancement is observed via monitoring scans in a user-defined ROI with a trigger threshold. As soon as the enhancement reaches its predefined threshold, the spiral scan is triggered as quickly as possible..

CARE Profile

Visualization of the dose distribution along the topogram prior to the scan

Topogram: Scanning perspectives: anterior-posterior (ap), posterior-anterior (pa), lateral (lat);

Image reconstruction, storage: 512 x 512 reconstruction matrix, reconstruction fields of 5 cm to 70 cm (with HD FoV) using raw data zoom with the possibility of freely selecting the image center either before scanning (prospectively) or retrospectively. Patient-related storage of

Item	Description

image and raw data.

HD FoV

Designed to enable visualization of the human body parts and skin line located outside of the 50cm standard scan field of view up to the bore size, based on an algorithmic complement of missing detector data outside of the 50cm standard scan FoV.

The image quality for the area outside the 50cm standard scan field of view does not meet the image quality of the area inside the 50cm standard scan field of view. Image artefacts may appear, depending on the patient setup and anatomy scanned.

DynSerio Scan

DynSerio Scan enables dynamic scanning using the detector width. Data is acquired at multiple time points over the same anatomical location while the patient table remains stationary.

WorkStream4D

Using the Workstream 4D workflow, you can directly generate axial, sagittal, coronal, or double-oblique images from standard scanning protocols, Therefore, you do not require thin slice data to be reconstructed prior to the production of reformatted images. This enhancement saves time when compared to alternative MPR techniques, eliminates manual reconstruction steps and reduces the data volume requirement, since virtually all diagnostic information is captured in 3D slices.

IVR (Interleaved Volume Reconstruction)

IVR enables utilization of the measured data as effectively as possible. By using IVR, the system extracts the maximum amount of diagnostic information from measured data, thereby improving spatial sampling in z-direction, independent of pitch

X-CARE

a) Provides organ dose reduction for radiation-sensitive peripheral organs e.g. eye lenses, while maintaining image quality

b) Keeps the average CTDIvol constant, i.e. with and without X-CARE

c) myExam Companion* individualizes the utilization of X-CARE by considering the gender and breath-hold capability of the patient

*Availability depends on country-specific regulatory approval and release.

Adaptive Signal Boost

Adaptive Signal Boost amplifies low signals when high attenuation is present - such as when imaging obese patients or patients with metal implants. This reduces streak artifacts, ensuring correct HU values are maintained without compromising on spatial resolution. By analyzing signal quality and integrating information from neighboring detector elements into areas with low signals, it can significantly reduce image noise.

Item	Description

DoseMAP

DoseMAP - Siemens CT Dose Management Program - creates transparency in dose values and makes it possible to assess the dose situation. It improves security by setting dose alerts. DoseMAP has three components for complete and comprehensive dose management: Report, Analyze, and Protect.

***syngo* System Security**

Modern way of guarding against malware, viruses and malicious attacks

- provides functionality for user Management and flexible access control for patient data,

improves IT security,

avoids system breakdowns due to malware installations which results in higher system uptimes and reliability,

reduces risk of unwanted software installations,

supports local IT personel,

improves system performance and robustness,

improves security for the use of external storage devices

---

3   SW Base Extension VA40

Check&GO Metal Detection

Check&GO Metal Detection helps to prevent mistakes and rescans by alerting the user when metallic objects such as belts, chains, keys, earrings or other are not removed and present on the scan area after the topogram is done. It informs the user both on the tablet and the console for their presence before the spiral or the sequential scan.

Flex Dose Profile

For long scan ranges, Flex Dose Profile works in combination with CARE Dose4D and FAST Planning to allow a more optimal modulation of the dose. In longer scans, some organs require more dose than the rest of the scan, i.e. there are different target dose levels needed for different anatomical regions, e.g. in regular thoracoabdominal examinations or in chest pain or TAVI procedures. FAST Planning automatically detects individual patient landmarks and anatomies, while Flex Dose Profile adjusts the tube currents for more personalized and accurate dose handling. Flex Dose Profile is displayed on the AWP and the Scan&GO tablet with the same visual logic as any other procedure, so users of any level of experience can utilize it right away.

Tilted spiral

Tilted spiral scan mode for additional clinical flexibility.

---

4   TwinSpiral Dual Energy

Item	Description
	The robustness of the spectral separation is a key factor for the quality of the final images. The spectral properties of the Tin Filter lead to better spectral separation and therefore, amongst other benefits, potentially results in better tissue characterization. Leverage the power of the Mobile Workflow with end-to-end Spectral imaging protocols running from the tablet*. Now users of any level of experience can perform spectral imaging examinations with dual energy from the tablet right away, as the TwinSpiral protocols offer a holistic approach which starts from the scanning part and extends to the automatic way of generating the results. The new TwinSpiral workflow feels like a single scan. The patient experiences virtually zero inter-scan delay between the scans. Empowered by such a holistic approach, overall protocol execution time is expected to be reduced. *Availability depends on local regulations
5	**myExam Compass** **myExam Compass:** myExam Compass offers knowledge-based guidance at the hands of the technologist supporting individual patient characterization, based on patient input (size, age, sex, ECG) and interactive questions, adaptable by users, in their own clinical language (e.g. "does the patient have a metal implant?", "can the patient hold the breath longer than 5 sec?") myExam Compass is based on expert use and condensed knowledge from thousands of exams in our installed base. Enhance consistency and standardization of your CT procedures by sharing myExam Compass protocols across your institution or other peers through teamplay.
6	**Cardio Base Package** **Physiological Measurement Module** The Physiological Measurement Module allows to connect a 3 Channel ECG cable for ECG controlled cardiac acquisition. **ECG cable** Item includes 3 channel ECG cable according to respective IEC color coding. **Cardio Spiral** The option supports adaptive retrospective ECG-gated spiral scanning to obtain CT images of the heart in defined phases of the cardiac cycle. **BestPhase** A software dedicated to automatically detect the optimal phase for motionless coronary visualization. **Cardio Quick Sequence** Prospective ECG triggered quick cardiac scan mode for coronary CaScoring imaging.

Item	Description

syngo **.CT CaScoring** This function is avalable also on Doctor workstation

syngo .CT CaScoring allows visualization and quantification of calcified coronary lesions volume (in mm³), calcium mass (mg calcium hydroxyapatite), vessel specific and total Agatston equivalent score and the number of lesions. Scoring can be performed separately for the main coronary branches (RCA, LM, LAD, CX). In addition, it calculates the virtual coronary age by comparison against a reference group. Combined with Rapid Results Technology it enables zero-click post-processing of both Agatston Scoring as well as coronary age analysis.

Any kV CaScoring This function is avalable also on Doctor workstation

Any kV CaScoring enables you to choose any kV setting for your calcium scoring scan. Previously the setting was limited to 120 kV only. A specific reconstruction kernel (Sa36) is applied and allows to perform Agatston equivalent low-dose scores, even at lower kV settings.

Recon&GO CaScoring This function is avalable also on Doctor workstation

For the first time, Inline CaScoring makes the Calcium Score available as zero-click reconstruction. With the known functionality of Recon&GO, Inline CaScoring calculates automatically the total Agatston Score as well as the Coronary Age (based on trial data) and archives them directly in the PACS. Results can be opened in *syngo* .CT CaScoring directly at the AWP and further processed if needed.

7	**Scan&GO wireless edition** This allow to use acquisition workplace for post processing during acquisition.

New mobile workflow

Scan&GO is a mobile workflow that allows the operator to control scans covering the full clinical spectrum remotely, via an application on a tablet and a remote control. The operator can reduce walking time and potentially accelerate patient preparation and positioning with the Scan&GO tablet application. At the same time, they can stay close to the patient for most of the examination time.

Post the scan, the operator can preview images after the scan thanks to wireless image transfer to tablet. They can also finalize the exam and trigger pre-configured reconstruction tasks.

With the Scan&GO workflow, the operator can stay mobile and prepare the entire protocol next to the patient in time critical situations. They have the choice to leave the room only when triggering the radiation and spend the rest of the time with their patient.

Another benefit is that you can keep your patient comfortable and minimize movement artifacts by staying close and guiding breathing. Maximize patient throughput with a more streamlined workflow solution.

8	**High-speed 0.33 s**

9	**Ultra-FAST IRS II**

Excellent performance for higher reconstruction rates and more robust performance.

10	**307 kg Patient Table**

Item	Description
	- Scannable range 2000 mm / 78' with patient table extension
	Table feed speed 1 - 200 mm/s
	Vertical table travel range 515 - 900 mm / 20.3" - 35.4" (table center)
	Max. table load 307 kg / 676 lbs
11	**2nd Control-room Monitor**
12	**myExam Cockpit**
	The central engine of Exam Compass is driven by this cockpit: the central user interface for fast and intuitive protocol configuration. In this expert mode, users benefit from high flexibility in modifying predefined protocols and the option to integrate their knowledge into standardized protocols, and through Exam Compass, make them available for every user across your institution.
13	**Coronal Supine Head Holder**
14	**Table Accessories Set**
15	**Identifier SRS**
16	**Advance Plan Information**
	The following content is informative only and represents delivered content only with a local service agreement.
	Advance Plans are available in three plan configurations: Advance Plan CORE, Advance Plan FIT and Advance Plan MAX. Each Advance Plan consists of the same digital key components, the AdvanceNow continuous upgrade service and our digital platforms teamplay Fleet, PEPconnect and SRS.
	AdvanceNow, Siemens Healthineers' unique long-term update & upgrade service, keeps your imaging equipment secure and highly efficient throughout its entire serviceable life, by constantly and proactively providing updates and cybersecurity patches, online. To benefit from advancements in intelligent imaging and deliver efficient precision medicine, system software upgrades are provided as soon as they become available and computing hardware is replaced as soon as required.
	Siemens Healthineers' digital platforms –online touchpoints that move our services closer to you –provide immediate access to service experts, equipment information, and education insights. This enables fast action with less interruption of your daily business and opens up a wealth of intelligent services: from fast remote technical support, to virtual training and more.
	Furthermore, our planned and corrective maintenance services keep your systems performant and operations running, while covering your fundamental regulatory, quality and financial needs.
17	**AppS Training Imaging**
18	**syngo.via RT Bundle Identifier**

Item	Description

19   **syngo.via CT Workplace SW VB60**

syngo. via CT Workplace provides one graphical user interface to prepare and read images from Computed Tomography Images.

General functions, including:

- Browser functionality for fast patient and data access

Case navigator for easy and fast case navigation

Automatic image Processing

Loading and displaying images of images in user-specific layouts, multiple layouts for 2D, 3D diagnosis

Ad Hoc workflow change for flexible application handling

Scrolling through images (for example, movie mode, fast mouse scrolling, synchronized scrolling)

Mirror, rotate, invert, windowing, pan/zoom, annotations, distance and angle measurement, pixel lens, and ROI/VOI evaluation

Timecurve evaluation

Findings navigator - create, collect , navigate and present findings quickly

Correlated cursor

Series synchronization for pan/zoom, windowing, LUT, scrolling

User-defined context menu

Snapshot images as secondary capture

Movie export

Integrated 3D tools, such as:

- All reformats immediately available: VRT, MIP, MIP thin, MinIP, MPR thin / thick, interactive slice thickness change

VRT Punch, VRT Gallery

Clip plane and clip box

Table removal

Bone removal for fast segmentation and removal of bony structures

MPR/MPR Fusion and registration

Item	Description

Parallel, curved & radial ranges

2D & 3D reference lines, 3D reference point

Region growing and quantification for interactive segmentation of anatomical structures

Anatomic intelligence:

- Automatic spine labeling

Automatic rib labeling for CT thorax scans

Automatic landmark registration for accurate anatomical alignment of multiple time point cases

Applications for dedicated clinical areas

Beside standard 2D/3D capabilities, the following advanced functionalities for dedicated clinical areas are part of *syngo.* via.

These applications are medical products in their own right and necessary country-specific approvals might not yet be available (e.g. 510k, CE Mark).

***syngo*- CT Coronary**

Review Marker, Heart Isolation, Movie (Beating Heart), Plaque Visualization, Manual Coronary Tracking (> 2 click centerline), Cardiac Planes, Curved & Cross-Section MPR, context-specific reporting

syngo.CT Vascular

Review Marker, Manual Vessel Tracking (> 2 click centerline), Curved & Cross Sectional MPR, Integrated Reporting Plaque Visualization, context-specific reporting

***syngo* .CT Dual Energy** *syngo* .CT Dual Energy offers a viewer that displays a fused image for initial diagnosis. It includes Optimum Contrast to calculate automatically contrast-optimized images, the possibility to calculate monoenergetic images for a range of 40 - 190 keV as well as *syngo* .CT DE Rho/Z to display electron density and effective atomic number maps. The additional, optional Dual Energy applications utilize *syngo* Dual Energy's two data sets even further: the material-specific difference in attenuation enables an easy classification of the elementary chemical composition of the scanned tissue. The Rapid Results Technology offers the ability to select the required Dual Energy results in the scan-protocol. After auto-transfer of the image data to the connected *syngo* .via system, all predefined results are calculated automatically. On top of that, an immediate distribution of the results to the connected reading environment can be triggered. *syngo* .CT Dual Energy works with Dual Energy images from SOMATOM Definition, Definition Flash, SOMATOM Drive & SOMATOM Force and with single source Dual Energy images from SOMATOM Definition Edge, SOMATOM Definition AS family, SOMATOM Perspective and SOMATOM Scope (Power configuration).

Workflow automation:

Disease-specific workflow mapping is performed based on image information (modality and/or

Item	Description

study description)

More functionality, including:

- Query/retrieve from DICOM nodes

Exporting images and creating patient media

Filming (DICOM print) or postscript printing functionality

Prerequisites for all service-related issues:

- Availability of a customer administrator that performs dedicated administration and support tasks (like 1st-line support, data security, backup)

Minimum permanent broadband Internet connection bandwidth for uncompromised service support. Otherwise, certain support services may not be provided and the agreed remote response time cannot be guaranteed. Specification of minimum broadband Internet connection in detail:

- Downstream: 2000 kBit/s for Software update, IT- and Application support (Siemens Remote Service - SRS)

Upstream: 512 kBit/s for Application support (SRS)

Upstream: 256 kBit/s for Software update and IT support (SRS)

Scope of delivery:

- DVDs with *syngo* .via software - VB60

(software license for one *syngo* .via client user)

20	**syngo.via Project Identifier**
21	**syngo.via VB60 Documentation Check**
22	**Workplace/Workstation Hardware** **Brief description**

Type: Hewlett Packard server-based workstation

Operating System: Windows Server 2019 Standard

Processor: 1x CPU Xeon Gold

RAM: 96GB

System and Database Disk: SSD RAID 1

Image and Backup: HDD RAID 5

Item	Description

Gross Image Storage: approximately 1700GB

Optical drive: CD/DVD-RW

Graphical Processing Unit: NVIDIA Quadro RTX

Mouse: USB Optical Scroll Mouse

Included accessory: USB Standard international keyboard

Recommended Environment Requirements

A 100 Mbit/s (minimum) / 1 Gbit/s (recommended) network environment is needed for optimal performance.

For remote access a 6 Mbit/s (minimum) / 10 Mbit/s (recommended) broad-band connection is required.

Technical details are subject to change without notice!

---

23   **Prime HW Support WS 5y**

Brief description

Prime HW Support with a service window depending on your IT Care Plan and on the SIEMENS Healthineers Customer Care Center (CCC) office hours.The delivery of the on-site Break&Fix support is performed by HPE.

Content of the Prime HW Support:

- Remote problem diagnosis and support –Siemens Healthineers Service remotely uses HPE support tools to isolate your problem and facilitate resolution in close cooperation with the next HPE service hub in your area.

Break & fix service with on-site support. –For issues that cannot be resolved remotely, an authorized HPE Services representative will be sent on-site and returns your system to operational condition, repairing or replacing components or entire units. If required, HPE services restore at the same time system and network functionality to allow Siemens Healthineers Service to seamlessly continue with any further required remote service activity.

Defective Media Retention Service –This option lets you protect sensitive data by keeping your defective disk, without the need to return defective media.

- Integrated service management : - This customized solution speeds up the incident and problem management process by directing the issue forthright to HPE.

Enhanced HW support –Provision of necessary BIOS-, Firmware and Driver update packages to keep the HW system up to date. Required patches and updates are provided remotely to be installed conveniently during the next application maintenance or service window by the responsible IT system administrator.

---

24   **Monitor EIZO MX232W col. 2.1MP**

Item	Description

Brief description

Size: 23"

Brightness: 300 cd/m²

Contrast ratio: 1000:1

DICOM calibration: with bundled RadiCS LE quality control

After-sales service: 3 years swap service

Due to country-specific regulations, the monitor will be shipped without a power cable. The power cable will need to be sourced locally.

---

25   CTWP CT Cardiac Package

The *syngo* **.via CTWP CT Cardiac Package** permits access for the following software modules:

Software Modules

syngo. **CT CaScoring** is a workflow step that allows visualization and quantification of calcified coronary lesions. It provides volume (in mm³), calcium mass (mg calcium hydroxyapatite), vessel specific and total calcium score (Agatston method) and number of lesions. During the evaluation, the patient's score can be compared to the scores of a healthy reference group.

- Implemented large reference databases are:

- MESA, McClelland, Circulation, 2006 (USA, 6,110 patients) Data support for different ethnic groups: CaucasianAsian, Hispanic, etc.

Hoff, Am J Cardiol, 2001 (USA, 35,246 patients)

Rumberger, Mayo Clinic, Proc, 1999 (USA, 1,898 patients)

HNR, Schmermund, Atheroscl., 2006 (Germany, 4,275 patients)

Raggi, Circulation, 2000 (USA 9,730 patients)

syngo. **CT Coronary Analysis** provides a set of automatic pre-processing steps and display functions for evaluation and quantification of angiography images of the coronary arteries. With these features, the case is ready for review when first opened, thus saving many manual workflow steps.

- segmentation and labeling of the major coronary branches

Single-Click stenosis measurement

The **VesselSURF** tool enables 3D vessel assessment in axial slices. As the vessel is being surfed the cross section and best longitudinal view are displayed

The Image Sharpening tool allows for evaluation of calcified lesions or stents without the need

Item	Description

for an additional reconstruction at the scanner

Zero-click visualization of the **coronary tree**

Automated centerline

Straightened MPR view for complete vessel overview

syngo. **CT Cardiac Function** is a workflow step that allows reading and diagnosing CT angiography images of the heart for the evaluation of left ventricular function. The software automatically calculates the global parameters of ejection fraction, myocardial mass, stroke volume, cardiac output, end-systolic and end-diastolic volumes.

Automatic calculation of functional parameters (e.g. Wall Thickness ES, Wall Thickness ED, Wall Thickening, Wall Motion)

- The local parameters of wall motion, wall thickness and wall thickening are displayed in 17-segment 2D polar maps in accordance with the American Heart Association (AHA)

Aortic Valve and Mitral Valve plane display

With **Rapid Results Technology** you can automatically generate and archive reproducible and ready-to-read standardized visualizations of the coronary and general vessels in various types and orientations.

- **Customize** your every-day procedures by defining and saving individual Protocols in the Protocol Configurator

Re-use your **own configured protocols** for an automated generation of snapshots, radial and parallel ranges for MPR, MIP, VRT and Cinematic VRT* images (incl. VRT presets) in every case

Save time by **standardizing image creation** , including PACS series and filming

Pause the Protocol execution at any time and adjust settings interactively

Configure result names and properties including snapshot and range series

Send your findings to report and printing

Provide hints, tips, and recommendations both to bring standardization to clinical routine and in order to **educate fellow colleagues**

Integration of **measurement tools** into a protocol, such as length and diameter measurements

- enabling a direct communication between scanner and PACS, utilizing your *syngo* .via workstation

New with VB40:

- Rapid Results Technology for total CaScore

New with VB50:

Item	Description

- Rapid Results Technology for Coronary Tree and Heart Isolation Pacs ready results

* Only available if the applicable license has been purchased.

The *syngo* **.via Cinematic VRT** provides photorealistic 3D views of CT datasets through photon simulations. Multiple advanced image processing features like automatic volume rendering technique (VRT) range generation, mask handling, clip plane functionality and others are provided. Together with various view options this enables the user to highlight anatomical details of clinically relevant structures

---

26   **syngo.CT Vascular Analysis #1**

syngo. **CT Vascular Analysis** allows to evaluate and quantify CT angiography images of the general vessels. It provides a set of auto-preprocessing steps and display functions. These functions make it possible that the case is immediately ready for review when opened, thus saving many manual workflow steps.The **VesselSURF** tool enables 3D vessel assessment in axial slices

- Auto pre-processing steps, like auto bone and table removal, provide an **immediate vascular-only view**

The 2-click center line creation allows for **vessel segmentation** and CPR display

Vessel analysis tools provide all relevant information, e.g. stenosis diameter and area, curved length, profile curve, minimum lumen identification, etc.

Measurement and reporting tools for therapy support, such as stent planning in case of AAABone & Vessel Isolation mode for selective highlighting of high-contrast structures, for example to bring out the bone in trauma cases involving fractures of the femur or hip

- Straightened MPR view for complete vessel overview, stenosis identification, and measurements

With **Rapid Results Technology** you can automatically generate and archive reproducible and ready-to-read standardized visualizations of general vessels in various types and orientations.

Customize your every-day procedures by defining and saving individual Protocols in the Protocol Configurator

- Re-use your **own configured protocols** for an automated generation of snapshots, radial and parallel ranges for MPR, MIP, VRTand Cinematic VRT* images (incl. VRT presets) in every case

Standardized image creation , including PACS series and filming

Pause the Protocol execution at any time and adjust settings interactively

Configure result names and properties including snapshot and range series

Send your findings to report and printing

Integration of **measurement tools** into a protocol, such as length and diameter measurements

enabling a direct communication between scanner and PACS, utilizing your *syngo* .via

Item	Description

workstation

* Inlcuded in *syngo* Automate&RoutinePackage

The syngo.via Cinematic VRT provides photorealistic 3D views of CT datasets through photon simulations. Multiple advanced image processing features like automatic volume rendering technique (VRT) range generation, mask handling, clip plane functionality and others are provided. Together with various view options this enables the user to highlight anatomical details of clinically relevant

---

27   syngo.CT Neuro DSA #1

syngo.CT Neuro DSA removes/supresses bone structures in CTA (CT Angiography) scans to provide a bonefree view of the cerebral vessel system/vasculature.

Features:

- Low dose volume datasets without contrast media are automatically subtracted from a CTA dataset

- One click aneurysm tool

---

28   syngo.CT Neuro Perfusion #1

syngo .CT Neuro Perfusion, available both as guided or automated (Auto Stroke) workflow, allows for the visualization of dynamic processes for example brain tissue perfusion and contrast flow through vessels. syngo.CT Neuro Perfusion processes dynamic scans / 4D imaging volumes / 4D datasets that were reconstructed from consecutively acquired CT data after the injection of contrast media.

syngo.CT Neuro Perfusion allows the user to save perfusion maps and tissue at risk maps [TAR] (penumbra/core).

Tissue at risk can be visualized in 3D color maps, based on the mismatch between blood volume (CBV) and blood flow (CBF). Alternatively, custom mismatch parameters can be defined (including Tmax, relative Cerebral blood flow (rCBF) and relative Cerebral blood volume (rCBV)). syngo.CT Neuro Perfusion allows for quantitative analysis of perfusion maps and time attenuation curves. syngo.CT Neuro Perfusion automatically calculates the volume of penumbra, infarct, hypoperfusion, mismatch ratio and perfusion recuperation fraction.

syngo.CT Neuro Perfusion provides the following results:

- Cerebral blood flow (CBF)

Cerebral blood volume (CBV)

Local bolus timing (time to start (TTS), time to peak (TTP), time to drain (TTD))

Mean transit time (MTT)

Transit time to the center of the IRF (TMax)

Item	Description

Flow extraction product (permeability)

Temporal MIP

Temporal Average

Baseline Volume

- Modified dynamic input data

syngo.CT Neuro Perfusion allows the calculation of mirrored regions or volumes of interest and the visual inspection of time attenuation curves.

syngo.CT ASPECTS calculates the ASPECT score of a non-contrast CT head scan based on a 10-point quantitative topographic CT scan and highlights the affected brain regions as an overlay on the CT image. The images and results are automatically calculated in the background and can be directly sent to PACS without any user interaction.

Within your PACS or in *syngo* .via MMReading the ASPECTS overlays can be toggled on/off (depends on the capabilities of the used PACS system, PACS needs to support DICOM 6000). Full window and level capabilities of the non-contrast CT head images are maintained

29	**syngo.CT Colonography #1**

syngo .CT Colonography combines 2D and 3D reading strategies. Flexible screen layouts and dual monitor support permit instant switching between the 3D endoscopic view and the corresponding 2D images. It allows to perform a synchronized flight in both prone and supine positions. The registered navigation offers both endoscopic views in a side-by-side display on up to two monitors. The Findings Navigator automatically collects and stores all marked findings.

In detail the application provides:

- Synchronized real-time display of two scans (prone and supine) on up to two monitors

Support of dual monitor setup

Synchronized update of endoscopic, axial and global views

Real-time virtual endoscopic viewing

Fully automated flight path finding

Automated tagging of the small bowel for removal from examination

Display of entire colon for easy overview of path

Overview segment containing flight path and marked findings

Semi-automated polyp measurement in 3D endoscopic view

Visualization of stool tagging

Item	Description

- A panoramic endoscopic view of the colon allows the user to visualize the colon in both directions, enabling visualization of the area behind folds while flying in one direction.

The Findings Navigator collects, stores, and exports marked findings

- Findings can be reviewed from the Findings Navigator and reported easily according to C-RADS standard.

---

30   syngo.CT Pulmo 3D #1

syngo .CT Pulmo 3D is a *syngo* .via application that utilizes native CT chest scans for assessment of lung parenchyma and airways.

In detail the application provides:

- Automated segmentation of left and right lung, including differentiation of lung lobes, thirds, and core / peel

Interactive lobe segmentation editing

Automated calculations for different lung lobes as well as whole, left, and right lung. Tabular display of: lung volume, relative volume, emphysema index, mean lung density (MLD) [HU]

Measurement and color coded display of emphysema index

Color coded display of different user defined sub-ranges

Color coded visualization of different percentile

Color coded visualization of voxel cluster below user defined threshold

Automated segmentation of airways including trachea and bronchi

Automated evaluation and color coded display of the trachea and bronchi

Measurement of airways structures including wall thickness, lumen diameter and associated vessel

Comprehensive export of calculations and measurements

All results are stored in *syngo* .via's findings navigator.

---

31   syngo.CT Body Perfusion #1

syngo .CT Body Perfusion facilitates the 3-dimensional quantitative evaluation of dynamic CT data of organs and tumors, following the injection of contrast media. By providing images of blood flow, blood volume, and permeability from dynamic CT images, *syngo* .CT Body Perfusion lets users assess perfusion disturbances and perfusion changes

In detail the application provides:

- Fast simultaneous multislice calculation of images of:

Item	Description

- Blood flow

Blood volume

Permeability

Various additional perfusion parameters

- MBF filtering to improve the image quality

Automated motion correction for improved anatomical alignment

Guided workflow

User-defined individual evaluation templates

Input of target volume of interest (VOI) and multislice segmentation of organ and area of interest

VOI measurement tools for a detailed analysis of perfusion characteristics

Composite images allowing a merged display of an anatomical image with a color parameter display

Dedicated liver perfusion analysis - calculation of arterial and portal venous hepatic blood flow and determination of the hepatic perfusion index

All results are stored in *syngo* .via's findings navigator.

---

32 **AppS Train Pkg syngo.via CT WP**

<u>Application Training includes:</u>

syngo. via Standard User functionality training:

- Patient Navigation, data handling

- User Interface, mouse concept handling

- Standard Reading Functionality

syngo .via Advanced User functionality training:

- Basic Functionalities in *syngo* .CT Cardiac, *syngo* .CT Vascular, *syngo* .PET/CT Oncology: *syngo* .CT Dual Energy.

Clinical customization:

- Adjustment of system functions and workflow setting parameters within the User Interface (Prefetching, Worklists, Layouts, Monitor settings on the clients)

- Definition of assignment rules based on RIS examinations and/or modality scan protocols to

Item	Description

their corresponding *syngo* .via workflows

- Optimization of data/image flow (e.g. scanner protocols, thin/thick slices, send jobs)

- Adjustment of default report templates

- Consultancy about additional workflow settings in the Service UI (Adjustment by Implementation Engineer and/or IT Administrator necessary)

The Siemens Application Specialist will support the clinical integration of the main modality into *syngo* .via CT Workplace.

The Clinical Administrator will be trained on the customization of additional scanners or modalities and on the assignment of site-specific workflows.

Thus the initial training is focused on one (1) Clinical Administrator and two (2) nominated Clinical Users. The customer has to provide the names of the Clinical Administrator and the Clinical Users to be trained, and ensure availability for training at the agreed training dates.

Before the application training, the Siemens Implementation Engineer will take care of the IT related system implementation which includes:

- Implementation DICOM Modality Worklist from RIS

- Configuration of DICOM and network nodes, e.g. *syngo* MMWP etc.

- Configuration of archiving rules

- Configuration result transfer from Findings Navigator & Report into PACS and/or RIS

- Configuration of Network nodes between modality, *syngo* .via, PACS, RIS, printer etc.

- Configuration of Short-term storage, e.g. fill level for auto deletion

- Auto-Deletion, Auto-Archiving, Auto-Routing

Installation of clients, setup of user groups and roles

33	**Handover AppTrain CT Cardiovascular**

Brief description

The objective of this continuous Education Plan is to give the participants the necessary theoretical knowledge and practical experience to routinely operate the *syngo* .via system, and to become acquainted with the advanced multimodality clinical applications over the subscription term.

Among other methodologies; lectures, interactive practical exercises and e-Learnings will familiarize the participants with the functionality of *syngo* .via and the clinical case-specific applications.

Clinical Administrators will be trained as well in relevant clinical settings and configuration of the system. The customer has to provide the names of the Clinical Administrator and the

Item	Description

Clinical Users to be trained, and ensure availability for training on the agreed training dates.

The Education Plan includes:

Pre-Training clarification:

Prior to the training, an analysis of the hospital/department workflow will be performed together with the nominated Clinical Administrator, resulting in a training outline tailored to your needs. The training sessions will be performed subsequently over the contracted subscription term.

syngo .via Advanced Visualization application training, based on country regulatory application availability:

- *syngo.CT Coronary Analysis*

syngo.CT Vascular Analysis

syngo.CT Vascular Autotracer

syngo.CT Cardiac Function

syngo.CT Cardiac Func. Enhance

syngo.CT Cardiac Func. RVA

syngo.CT Rapid Stent Planning

syngo.CT CaScoring

syngo.CT DE Direct Angio

syngo.CT DE Heart PBV

syngo.CT DE Hardplaque Display

syngo.CT Myocardial Perfusion

syngo.CT TAVI Valve Pilot

Clinical customization:

- Adjustment of system functions and workflow setting parameters within the User Interface (Prefetching, Worklists, Layouts, Monitor settings on the clients)

- Definition of assignment rules based on RIS examinations and/or modality scan protocols to their corresponding *syngo* .via workflows

- Adjustment of default basic reporting

The Siemens Application Specialist will support the clinical integration of the *syngo* .via into the institution clinical workflow.

Item	Description

Delta training:

Siemens will provide education means and training sessions for keeping up-to-date users' knowledge and competences along with *syngo* .via product lifecycle in case relevant susbscription contract is available (version upgrades).

The Clinical Administrator will also be trained on the customization of additional scanners or modalities and on the assignment of site-specific workflows.

Application training hours per day can vary depending on country regulation.

Effort or financial value recommended for Handover AppTrain CT Cardiovascular packages is 3 days in total. This package is designed to suit the needs of training for 1-2 users, or one group.

In case of multiple user groups are need to be trained for the first year, increase training effort respectively.

Before the application training, the Siemens Implementation Engineer will take care of the IT related system implementation which includes:

- Implementation DICOM Modality Worklist from RIS

- Configuration of archiving rules

- Configuration result transfer from Findings Navigator & Report into PACS and/or RIS

- Configuration of Network nodes between modality, *syngo* .via, PACS, RIS, printer etc.

- Configuration of Short-term storage, e.g. fill level for auto deletion

- Auto-Deletion, Auto-Archiving, Auto-Routing

Installation of clients, where applicable, and setup of user groups and roles

---

34 **syngo.via Modality WP Impl. Pkg. HQ**

The Implementation Package includes the following tasks for *syngo* .via Modality Workplace (called *syngo* .via Modality Workplace):

- Basic hardware installation and network integration, including up to one *syngo* .via client (does not apply for *syngo* .via MI Workplace for SPECT)

Activation of Siemens Remote Services connections

Import of all *syngo* .via server license files

- Basic clinical configuration and integration of up to 3 DICOM nodes in *syngo* .via Modality Workplace (modality scanner and one PACS and one DICOM printer). All nodes need to be validated for connection with *syngo* .via.

- Configuration of basic workflow rules

Item	Description

Acceptance Test in cooperation with the customer

Context of the implementation tasks:

- The DICOM conformance of the DICOM nodes is a prerequisite for connection to *syngo* .via.

The DICOM nodes to be connected to *syngo* .via Modality Workplace must be configured and tested by the customer. If necessary, the customer orders these services from the DICOM node's vendor.

The configuration of the customer's Local Area Network is performed by the customer.

Provision of a minimum broadband Internet connection bandwidth with 2000 kBit/s downstream and 256 kBit/s upstream for Siemens Remote Services (SRS) by the customer. If the customer does not provide SRS connectivity, then additional professional services for implementation without SRS support are offered. For service support after implementation the following minimum specification has to be provided: Downstream 2000 kBit/s (for Software update, IT- and Application support); Upstream 512 kBit/s (for Application support); Upstream 256 kBit/s (for Software update and IT support).

The customer provides information, such as: IP addresses of the *syngo* .via Modality Workplace for its network integration and the DICOM nodes identifiers.

The customer provides the required power supply and the installation location for the server hardware, as well as the required LAN capacity. For the LAN capacity between *syngo* .via Modality Workplace and the PACS/ modality systems a min. of 1 Gbit/sec is required. Between *syngo* .via clients and server a min of 100 Mbit/ sec is required.

Presence and support of the customer's administrators (clinical and IT administrator) are required during implementation. In preparation for implementation support, the customer's administrators have completed the *syngo* .via web-based trainings, which are part of the scope of delivery.

A list of applications and systems with validated connectivity to *syngo.* via Modality Workplace can be requested from your Siemens Sales Representative.

If a DICOM node or another system has not been validated yet for connection to *syngo* .via by Siemens, then the customer will give his acceptance though there could be a narrowed functionality of the connection.

Project coordination is performed by Siemens. Please see the *syngo* .via Data Sheet for system requirements and detailed description of implementation tasks.

The hardware installation service includes the following tasks:

- Unwrapping, consolidation of all packaging material and notification to the customer that the materials are ready for removal.

Mechanical and electrical connections at site of operation

Connection to the power supply, to Uninterruptable Power Supply (if applicable)

Item	Description
	Startup of operating system; check status of patches, drivers, service packs and hot fixes, etc.
	Connection and network configuration of the server and the remote service board to the LAN
	Configuration of remote service board (network settings, users configuration) if supported by the server
	Test monitor setup (if applicable) and handover of the readily installed system to the customer.
	For the HW installation the customer provides:
	- Access to the location and space for server operation
	Electrical power
	LAN access and LAN configuration
	Configuration of the broadband internet access for Siemens Remote Services
	IT Administrator's coordination and support for the mechanical and IT installation.
	Server and monitor(s) are at the site of operation. The customer's monitors are accompanied by appropriate cables.
	The connection of one or two monitors to a *syngo* .via Modality Workplace does not include monitor calibration.
	- For a *syngo* .via Modality Workplace depending on local legal regulations, the monitor installation described here may allow viewing only.

| 35 | **Travel Costs HQ** |